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THE RUGGED TABLET AUTHORITY ™

READING FIRE DEPARTMENT FINDS RUGGED TABLETS MORE RESPONSIVE, RELIABLE THAN LAPTOPS FOR ePCR

MOTION F5 BY XPLORE RUGGED TABLETS FULLY MOBILIZE MEDICAL CREWS WITH REAL-TIME DATA, REPORTING

NO COMPROMISES REQUIRED

"We didn't have to compromise on workflow software capabilities or data security, and we didn't have to adjust our processes to accommodate hardware limitations as before. The F5m adapted to our operational environment."

Sean Hart
— Deputy Chief, Reading Fire Department

Customer

Company	**Reading Fire Department**
Industry	**Public Safety – Fire and Rescue**
Location	**Reading, Pennsylvania**

BACKGROUND

The Reading Fire Department provides fire protection and emergency medical services to the city of Reading, Pennsylvania. The team is dedicated to preserving the life and property of more than 87,000 residents through fire suppression and pre-hospital medical care activities, fire prevention, public outreach, and emergency planning.

The Reading Fire Department handles a very high volume of fire and medical rescue calls on a daily basis and, as a result, needs an efficient way to manage the heavy data demands that come with incident reporting in real-time, while they are in the field.

CHALLENGE

Overcome frequent mobile device failure to enable real-time ePCR documentation from anywhere

For many years, neither EMS nor firefighting crew members could formally document incident details until they returned to the station after each call. When multiple back-to-back calls would come in, reporting for all calls would be delayed until the end of the day and crews would be forced to stay long after their shift to complete the task. This lengthy desktop-based reporting process was prone to data entry errors. Plus, the lack of real-time status updates hindered other responders' situational awareness at various stages of emergency response.

In 2014, Reading Fire Department's IT team began working with NEMSIS provider ESO to design an electronic patient care reporting (ePCR) system for all of its emergency medical operations. Enabling real-time incident documentation and broader data sharing specifically while paramedics are in the field was the goal. This would aid in crew preparedness en-route to a call, improve on-scene coordination with other first responders, and better facilitate the patient handover to hospital-based medical teams when necessary.

The Reading Fire Department had initially selected Panasonic Toughbooks® as the portable computing platform for in-vehicle delivery of the ePCR software. However, the rugged laptops weren't as reliable – or as mobile – in the field as the department had hoped. The laptops were heavy and difficult to use one-handed in the heat of the moment, limiting real-time ePCR system engagement outside the vehicle. And many of the Toughbooks needed to be replaced after only a couple of years due to hardware failures, disrupting data-dependent operations in the field.

"Unfortunately, the laptops failed fast and they weren't easy to use outside the ambulance even when they did work," explained Deputy Chief Sean Hart, Reading Fire Department. "On many occasions, our crews had to revert to the old desktop-based reporting process. That reignited the same operational issues that we thought we had resolved by introducing the ePCR system."

So department leaders started seeking out a more durable and dependable computer platform to support the highly-valued ePCR software. They wanted a solution that would be conducive to real-time documentation and records review while crews were responding to

BENEFITS

Low rugged tablet PC failure rate, greater reliability of the entire mobility system

Unrestricted device mobility, leading to unrestricted real-time data capture and access

Full compatibility with existing ePCR software

Completely scalable mobile PC solution, flexible enough to support future workflow expansion, additional fire and rescue team field requirements

XPLORE PLATINUM PARTNER

ALLEGIANCE Tablet PC Experts

a call, performing their duties at the scene, and while en route to the next call or to the station. They needed a truly mobile device that was rugged enough to survive the rougher handling that comes with emergency response operations and the frequent disinfection from bodily fluid contaminants by EMS crews.

SOLUTION

Motion F5 by Xplore Delivers the Mobility, Reliability Needed to Gain Full ePCR Benefits

In early 2015, ePCR solutions provider ESO recommended that the Reading Fire Department consider one of Xplore's many rugged tablet solutions to replace the laptops. Several of the Xplore rugged tablet models were purpose-built for public safety environments, and ESO was confident that the fire department would find a platform with the right feature combination for their paramedics' needs. After reaching out to Xplore Platinum Partner Allegiance Technology to evaluate various rugged tablet solutions, Reading Fire Department determined that the Motion F5m by Xplore tablet PC was the right fit.

This truly mobile tablet PC offered the right level of built-in rugged protection against drops, dust, fluids, and other hazards of the job. It offered the right communications modules for dispatch, navigation, inter-agency coordination, and uninterrupted data transmissions. And it offered the processing power, storage capacity, data-capture tools and overall platform scalability to fulfill its immediate needs and future mobility goals.

"The F5m rugged tablet gave us anytime access to sensitive ePCR data with the right combination of internal and external safeguards," Deputy Chief Hart explained. "We didn't have to compromise on workflow software capabilities or data security, and we didn't have to adjust our processes to accommodate hardware limitations as before. The F5m adapted to our operational environment."

The F5m even accommodates access to patient reporting information when no internet connection is available, contributing to the improved quality of patient care. The department's ePCR software utilizes a cloud-based program that backs up data to a local encrypted drive. Paramedics can retrieve data – and capture data via the digital pen, touch screen, or hi-res camera – literally anytime, from any place.

RESULTS

Revenue, device reliability increase as paramedic reporting times, overtime decrease

The Motion F5m by Xplore rugged tablet proved to be the true mobile computing platform the Reading Fire Department needed to grant rescue crews full ePCR access in the field – not just at the station.

Since transitioning from laptops to Xplore rugged tablets, "time on task" levels have been reduced. Much of the department's emergency call data is directly imported by the ePCR reporting software into paramedics' individual reports via the rugged tablet. Department employees no longer need to remember what happened on a call 10 hours ago while attempting to catch up on reports. Plus, any additional note insertion can now be handled while en route to, or while returning from, calls. This has eliminated the previous report "pile ups" and allowed individuals to complete all necessary incident documentation during their shift – not after.

"Our paramedics love using the tablets in the patient compartment to complete reports," Deputy Chief Hart boasted. "Most will enter call-related

data into the cloud-based ePCR program either while performing patient care or while returning from the hospital. They have been grateful that the tablets help them leave work on time."

The backwards and forwards compatibility of the F5m with the fire department's other hardware, software, and back-office systems will enable the agency to save money long-term on its entire mobility solution – and has introduced business process improvements that protect revenue streams.

Patient signatures for all records are now collected directly into the ePCR program using either the F5m tablet's digital pen or finger touch option. This creates a complete, billable PCR that is electronically forwarded to Reading's billing department for faster processing and payment recovery. Within six months of rugged tablet rollout, overtime payments were reduced and department revenue increased due to more accurate and complete PCRs.

"By working with Allegiance to integrate the Xplore rugged tablet with our ePCR software, we eliminated the communication lapses, reporting delays, and data errors that we were experiencing with both desktop and laptop-based solutions," Deputy Chief Hart continued. "Allegiance was very responsive to our needs and provided competitive pricing for a superior product."

WHAT'S NEXT

Firefighters Turn to Motion R12 by Xplore Rugged Tablets for Remote Network, Workflow Access

The Reading Fire Department will soon introduce a cloud-based reporting system to expand firefighters' on-scene reporting capabilities. They are replacing their management's desktop computers with Motion R12 by Xplore rugged tablet PCs and workstations. This will allow more fire response team members to connect to the department's network remotely, thus increasing overall workflow functionality in the field.